

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. 091TVP01
Application No. 091
Revision 2:

Issue Date: September 18, 2002
Expiration Date: October 17, 2007

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the permittee, ConocoPhillips Company, for the operation of the Tyonek Platform.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As required by AS 46.14.120(c), the permittee shall comply with the terms and conditions of this operating permit.

All terms and conditions of Air Quality Operating Permit No. 9623-AA007 have been incorporated into this Operating Permit.

All terms and conditions of Air Quality Construction Permit No. 091CP04, April 28, 2003 have been incorporated into this Operating Permit. Under AS 46.14.290, the permittee is considered in compliance with applicable requirements of this Construction Permit to the extent allowed under 42 U.S.C. 7661c(f) (Clean Air Act, sec. 504(f)) by complying with this Operating Permit.

This Operating Permit becomes effective October 18, 2002.

John F. Kuterbach
Manager, Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society for Testing and Materials
C.F.R.	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
dscf	Dry standard cubic feet
EPA	US Environmental Protection Agency
gr./dscf	grain per dry standard cubic feet (1 pound = 7000 grains)
GPH	gallons per hour
HAPs	Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
ID	Source Identification Number
kPa	kiloPascals
MACT	Maximum Achievable Control Technology
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 C.F.R. 61]
NSPS	Federal New Source Performance Standards [as defined in 40 C.F.R. 60]
ppm	Parts per million
PS	Performance specification
PSD	Prevention of Significant Deterioration
RM	Reference Method
SIC	Standard Industrial Classification
SO ₂	Sulfur dioxide
TPH	Tons per hour
TPY	Tons per year
VOC	volatile organic compound [as defined in 18 AAC 50.990(103)]
wt%	weight percent

Section 1. Identification

Names and Addresses

Permittee:	ConocoPhillips Company P.O. Box 66 Kenai, AK 99611
Facility:	Tyonek Platform
Location:	61° 04' 36" North; 150° 56' 52" West
Physical Address:	Upper Cook Inlet, Alaska
Owner:	ConocoPhillips Company P.O. Box 66 Kenai, AK 99611
Operator:	Same as Owner
Permittee's Responsible Official:	Lindsey Clark
Designated Agent:	CT Corporation Co. 801 West 10th Street, Suite 300 Juneau, AK 99801
Facility Supervisor:	Michael Knight, Kenny Schramko, or Larry Baker (907) 776-2073
Fee Contact:	Shannon Donnelly ConocoPhillips Company P.O. Box 100360 Anchorage, AK 99510 Shannon.Donnelly@conocophillips.com

SIC Code of the Facility:

1311 - Crude Petroleum and Natural Gas

NAICS Code of the Facility: 211111

[18 AAC 50.350(b), 1/18/97]

Section 2. General Emission Information

Emissions of Regulated Air Contaminants, as provided in the permittee's application:

Nitrogen Dioxide, Carbon Monoxide, Sulfur Dioxide, Particulate Matter (PM-10), and Volatile Organic Carbons

Operating Permit Classifications:

1. 18 AAC 50.325(b)(1) Facility has the potential to emit more than 100 tons per year of a regulated air contaminant
2. 18 AAC 50.325(b)(3) Facility contains a source subject to a New Source Performance Standard
3. 18 AAC 50.325(c) Facility described in 18 AAC 50.300(b)-(e)

Facility Classifications as described under 18 AAC 50.300(b)-(f):

1. 18 AAC 50.300(b)(2) Facility containing equipment with a rated capacity of 100 MMBtu/hr
2. 18 AAC 50.300(c)(1) Facility has a potential to emit more than 250 tons per year of a regulated air contaminant

[18 AAC 50.350(b), 1/18/97]

Section 3. Fee Requirements

1. **General.** The permittee shall pay assessed fees in accordance with AS 46.14.240 -- 250 and 18 AAC 50.400 -- 420.

[18 AAC 50.350(c) & 18 AAC 50.400 – 420, 1/18/97]

2. **Assessable Emissions.** The permittee shall pay to the department an annual emission fee based on the facility's assessable emissions. The assessable emission fee rate is listed in 18 AAC 50.410(b). The department will assess fees for each ton of air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is either

- 2.1 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon previous calendar year actual annual emissions, when demonstrated by

- a. an enforceable test method described in 18 AAC 50.220;
- b. material balance calculations;
- c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
- d. other methods and calculations approved by the department; OR

- 2.2 the facility's assessable potential to emit of 719 tpy (294 tons of NO_x, 44 tons of SO₂, 268 tpy of CO, 44 tpy of PM-10, and 69 tpy of VOCs).

[18 AAC 50.350(c) & 18 AAC 50.410, 1/18/97]

3. **Assessable Emission Estimates.** Emission fees will be assessed as follows:

- 3.1 No later than March 31 of each year, the permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emission Estimate, 410 Willoughby Ave., Suite 303, Juneau, AK 99801-1795. The submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates, or
- 3.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 2.2.

[18 AAC 50.350(c) & 18 AAC 50.410, 1/18/97]

Section 4. Source Inventory and Description

Sources listed below have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 Source Inventory

ID	Source Name	Source Description	Rating/size	Install Date
Gas Fired Turbines				
1	Turbine/Compressor Set	Solar Centaur T-4700 Turbine Compressor No. 1	4700 hp	1999
2	Turbine/Compressor Set	Solar Centaur T-4700 Turbine Compressor No. 2	4700 hp	1999
3	Turbine/Compressor Set	Solar Taurus 60 T-7300S Turbine Compressor No. 3	7170 hp	2000
4	Turbine/Compressor Set	Solar Taurus 60 T-7300S Turbine Compressor No. 4	7170 hp	2000
Gas Fired Engines, Heaters, & Boilers				
8	Gas Electric Generator Set	Waukesha L-7042G Engine No. 1	604 kW	1968
9	Gas Electric Generator Set	Waukesha L-7042G Engine No. 4	604 kW	1968
10	Gas Heater	Glycol Heater No. 1	11.1MMBtu/hr	1968
11	Gas Heater	Glycol Heater No. 2	11.1MMBtu/hr	1968
12	Gas Heater	Glycol Heater No. 3	11.1MMBtu/hr	1968
13	Gas Heater	Glycol Regenerator #1	0.25MMBtu/hr	1968
14	Gas Heater	Glycol Regenerator #2	0.25MMBtu/hr	1968
15	Gas Heater	Glycol Regenerator #3	0.25 MMBtu/hr	1968
Diesel Fired Engines				
20	Engine	Caterpillar D-398 Engine No. 1	560 kW	1968
21	Engine	Caterpillar D-398 Engine No. 2	560 kW	1968
24	Engine	Manitowoc Crane Engine	230 hp	1968
25	Engine	Unit Crane Engine	230 hp	1968
28	Engine	John Deere 4039 Engine	80 hp	1992
33	Engine	Caterpillar 3306 Firewater Engine No. 1	231 hp	2002
34	Engine	Caterpillar 3306 Firewater Engine No. 2	231 hp	2002
Flares				
37	Gas Flare	HP/LP Flare Pilots	0.13 MMBtu/hr	1968
38	Gas Flare	HP Safety Flare	583.3 MMBtu/hr	1968
39	Gas Flare	LP Safety Flare	53.3 MMBtu/hr	1968

Notes: 1. The source ratings provided in MMBtu/hr refer to the higher heating value of the fuel.

Section 5. Source-Specific Requirements

Fuel Burning Equipment

Visible Emissions

- 4. Visible Emissions.** The permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source IDs 1, 2, 8 – 15, 20, 21, 24, 25, 28, 33, 34, and 37 - 39 to reduce visibility through the exhaust effluent by any of the following:

- a. more than 20 percent for more than three minutes in any one hour¹,
[18 AAC 50.055(a)(1), 1/18/97 & 40 CFR 52.70, 11/18/98]
- b. more than 20 percent averaged over any six consecutive minutes.
[18 AAC 50.055(a)(1), 5/3/02]

The permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) 3 & 4 to reduce visibility through the exhaust effluent by any of the following:

- c. more than 10 percent for more than three minutes in any one hour,
[Construction Permit No. 0123-AC011, 7/18/01]
 - d. more than 20 percent averaged over any six consecutive minutes.
[18 AAC 50.055(a)(1), 5/3/02]
- 4.1 For Source ID(s) 1 – 4 and 8 – 12 burn only natural gas as fuel. Monitoring for these sources shall consist of an annual certification that each of these sources burned only natural gas.
- a. In addition, the permittee shall conduct at least one Reference Method-9 observation for Source ID(s) 1 - 4 each calendar year and report the results in the operating report required by condition 53.
[Construction Permit No. 0123-AC011, 7/18/01]
- 4.2 For Source ID(s) 13 – 15, 24, 25, 28, 33 and 34 no monitoring is required because these units are insignificant emission units based on actual emissions. The permittee must annually certify compliance with the opacity standard.
- 4.3 For Source ID(s) 20 and 21 monitor, record, and report according to conditions 63 and 64.

¹ For purposes of this permit, the “more than three minutes in any one hour” criterion in this condition and condition 24 will no longer be effective when the Air Quality Control (18 AAC 50) regulation package effective 5/3/02 is adopted by the U.S. EPA. The six-minute average standard is enforceable only by the state until the new regulations dated May 3, 2002 is approved by EPA into the SIP at which time this standard becomes federally enforceable.

- 4.4 For Source ID(s) 37 – 39 (flares) monitor, record, and report according to condition 67.

[18 AAC 50.350(g)-(i), 1/18/97 & 18 AAC 50.346(c), 5/3/02]

Particulate Matter

- 5. Particulate Matter Emissions.** The permittee shall not cause or allow particulate matter emitted from Source ID(s) 1 – 4, 8 – 15, 20, 21, 24, 25, 28, 33, 34 and 37 – 39 to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/8/97]

- 5.1 For Source ID(s) 1 – 4 and 8 – 12 burn only natural gas as fuel. Monitoring for these sources shall consist of an annual certification that each of these sources burned only natural gas.
- 5.2 For Source ID(s) 13 – 15, 24, 25, 28, 33, and 34 no monitoring is required because these units are insignificant emission units based on actual emissions. The permittee must annually certify compliance with the particulate matter standard.
- 5.3 For Source ID(s) 20 and 21 monitor, record, and report according to condition 65.
- 5.4 For Source ID(s) 37 – 39 (flares) the permittee must annually certify compliance with the particulate matter standard.

[18 AAC 50.350(g) – (i), 1/18/97 & 18 AAC 50.346(c), 5/3/02]

Sulfur Compound Emissions

- 6.** The permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from Source ID(s) 1 - 4, 8 – 15, 20, 21, 24, 25, 28, 33, 34 and 37 - 39 to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97; 18 AAC 50.350(d)(1)(C), 6/21/98]

- 6.1 Diesel Fuel (Source ID(s) 20, 21, 24, 25, 28, 33 and 34):
- a. The permittee shall do one of the following for each shipment of fuel:
- (i) if the fuel grade requires a sulfur content less than 0.5% by weight, keep receipts that specify fuel grade and amount; or
 - (ii) if the fuel grade does not require a sulfur content less than 0.5% by weight, keep receipts that specify fuel grade and amount and
- (A) test the fuel for sulfur content; or
- (B) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.

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- b. Fuel testing under condition 6.1a must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the department.
 - c. If a load of fuel contains greater than 0.75% sulfur by weight, the permittee shall calculate SO₂ emissions in PPM using either Section 15 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).
 - d. The permittee shall report in accordance with this condition 6.1d.
 - (i) If SO₂ emissions are calculated under condition 6.1c to exceed 500 ppm, the permittee shall report under condition 51. When reporting under this condition 6.1d(i), include the calculation under Section 15.
 - (ii) The permittee shall include in the report required by condition 53.
 - (A) a list of the fuel grades received at the facility during the reporting period;
 - (B) for any grade with a maximum fuel sulfur greater than 0.5% sulfur, the fuel sulfur of each shipment; and
 - (C) for fuel with a sulfur content greater than 0.75%, the calculated SO₂ emissions in PPM.

[18 AAC 50.350(g) - (i), 1/18/97 & 18 AAC 50.346(c), 5/3/02]

6.2 Fuel Gas (Source ID(s) 1 – 4, 8 – 15 and 37 - 39):

- (i) Determine the fuel gas H₂S concentration in ppm by using ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association (GPA) method 2377-86 once every six months and submit copies of the records with the facility operating report required by condition 53.
- a. Report under condition 51 whenever gas combusted causes the sulfur compound emissions to exceed the standard of condition 6. When reporting under this condition, include a material balance calculation of the sulfur compound emissions, in ppm of SO₂, expected from this fuel.
- b. Record the H₂S concentration of the fuel gas analysis required under condition 6.2(i) and sulfur content under condition 6.1a(ii) and record all material balance calculations required under condition 6.2a.
- c. Attach summaries of the records required by condition 6.2b with the facility operating reports required by condition 53.

[18 AAC 50.350(g) - (i), 1/18/97]

Waukesha Generators (Source ID(s) 8 & 9)

7. The permittee shall operate and maintain the two Waukesha natural gas-fired generators with air-fuel controllers and catalytic converters.

[Operating Permit No. 9623-AA007, 4/14/97]

Flares (Source ID(s) 38 & 39)

8. The permittee shall provide a means of flow control to the flaring system, sized and installed, to limit fluid flows to no more than the design capacity of the phase separator. Liquids shall not be allowed to flow to the flare.

[Operating Permit No. 9623-AA007, 4/14/97]

- 8.1 Report the volume of gas flared calculated in condition 11 during the 3-month period covered by the operating report required in condition 53.

[18 AAC 50.350(i), 1/18/97]

Owner Requested Limits²

NO_x Emission Limits

9. The permittee shall limit combined NO_x emissions from sources listed in **Table 2** below to 20.2 tons per any 12-month consecutive period.

Table 2: Diesel Fuel Consumption Limits

Source ID #	Source Description	Example Calculations: Tons of NO _x emissions per 12-month consecutive period	Period Tons of NO _x emissions per 12-month consecutive period
20 & 21	Caterpillar D-398 Engines	$\frac{0.45}{2000}$ x gallons of diesel fuel per 12 month consecutive period	20.2 (combined total)
24 & 25	Loading Cranes Engines	$\frac{0.62}{2000}$ x gallons of diesel fuel per 12 month consecutive period	
28	John Deere 4039 Engine	$\frac{0.58}{2000}$ x gallons of diesel fuel per 12 month consecutive period	
33 & 34	Cat 3306 Firewater Engines	$\frac{0.51}{2000}$ x gallons of diesel fuel per 12 month consecutive period	

² For monitoring recordkeeping and reporting obligations prior to the issue date of Construction Permit No. 091CP04, see the original final operating permit issued September 18, 2002.

- 9.1 Monitor and record the diesel fuel use and hours of operation for each of diesel fuel burning equipment listed in for each calendar month. The fuel use may be estimated by measurement techniques and calculations approved by the department. Calculate the 12-month consecutive total fuel usage and 12-month consecutive hours of operation for each source listed in Table 1. Calculate NO_x emissions to ensure compliance with owner requested limits of 20.2 tpy as follows:
- From fuel use of each of sources 20, 21, 24, 25, 28, 33 and 34 and method set out in Table 2 above or
 - From hours of operation of each sources 20, 21, 24, 25, 28, 33 and 34 and maximum NO_x emission rate in lb/hr listed Section 16
- 9.2 Report the monthly and 12 month consecutive fuel use and hours of operation for each diesel fuel burning equipment. Report combined 12-month consecutive NO_x emissions from sources 20, 21, 24, 25, 28, 33 and 34 in accordance with condition 53.

[Construction Permit No. 091CP04, Preliminary 11/04/02]
[18 AAC 50.335(g) & 350(g) - (i), 1/18/97]

Hourly Limits

10. The permittee shall limit combined hours of operation of the replaced Cat 3306 Firewater Engines, sources 33 and 34 to no more than 340 hours per any 12-month consecutive period.
- 10.1 Monitor and record hours of operation of each source 33 and 34;
- 10.2 Report the monthly and 12 month consecutive hours of operation of each source 33 and 34. Report combined 12-month consecutive hours of operation in accordance with condition 53.

Natural Gas Consumption Limits

11. The permittee shall limit the consumption of natural gas for the sources listed in Table 3 below.

Table 3 Natural Gas Consumption Limits

Source ID #	Source Description	Million Standard Cubic Feet per Consecutive 12-Month Period
1 & 2	Solar Centaur T-4700 Turbines	805 (combined total)
10 – 12	Glycol Heaters #1-3	195 (combined total)
38 & 39	Gas Flares	252 (combined total)

- 11.1 Monitor and record the gas use and hours of operation for each³ of the gas burning equipment listed in Table 1, except Source ID(s) 3 & 4, for each calendar month. The fuel use may be estimated by measurement techniques and calculations approved by the department. Calculate the 12-month consecutive total fuel usage and hours of operation for each gas-burning source to ensure compliance with the owner-requested limits listed in Table 3 above.
- 11.2 Report the monthly and 12-month consecutive fuel usage and hours of operation for each piece of gas burning equipment in Table 1, except Source ID(s) 3 & 4, for each calendar month in accordance with condition 53.

[Construction Permit No. 091CP04, Preliminary 11/04/02]
[18 AAC 50.335(g) & 350(g) - (i), 1/18/97]

Source Emission Calculations

12. Calculate and record NO_x and CO emissions from all fuel burning equipment listed in Table 1, except Source ID(s) 3 & 4, for each calendar month based on fuel consumption and hours of operation as set out in Section 16 and as follows.
 - 12.1 Use a higher heating value of 1,007 Btu per scf for natural gas unless an alternative value has been measured for Tyonek fuel through an applicable ASTM method.
 - 12.2 For Source ID(s) 1 & 2, calculate total NO_x emissions by: using a NO_x emission factor of 0.426 lb per MMBtu or department approved site-specific emission factor determined from the results of the emission source tests.
 - 12.3 For Source ID(s) 8 and 9 use a NO_x emission factor of 2 grams per hp-hour or a department approved site-specific emission factor determined from the results of source tests.
 - 12.4 Report the combined monthly and 12-month consecutive total NO_x and CO emission rates for all fuel burning equipment except Source ID(s) 3 & 4 in accordance with condition 53.
 - 12.5 Submit a copy, with the next operating report, of the gas analysis if using an alternative heating value that differs from that specified in condition 12.1 above.

[Construction Permit No. 0123-AC011, 7/18/01]
[18 AAC 50.350(g) - (i), 1/18/97]

BACT Requirements for NO_x (Source ID(s) 3 & 4)

³ Emission units with identical rated capacity and emission factors may share a common fuel meter.

- 13.** The permittee shall operate the Solar Taurus 60 T-7300S Turbines only in the dry low NO_x mode⁴, except during low-load transient operations of start up and shut down. When operating the turbines in low NO_x mode, limit emissions of each unit to no greater than 25 ppmvd at 15% O₂ and 6.2 lb/hr, expressed as NO₂, averaged over any consecutive three hours.

[Construction Permit No. 0123-AC011, 7/18/01]

- 13.1 Monitor low NO_x mode operations for the presence of a pilot flame. Record the date, time, and duration for which the pilot flame is present for each of Source ID(s) 3 & 4.
- 13.2 Record the date, time, and duration for which either Source ID(s) 3 or 4 is in transient operations of start up or shut down mode.
- 13.3 Report the date, time, duration, and source number for which either Source ID(s) 3 or 4 is operating, but not in the low NO_x mode. Specify whether the operation was during start up, shut down, or another activity. All such other activities that result in operation out of the low NO_x mode for more than 6 minutes in any 3-hour period shall also be reported as an excess emission as set out in condition 51.
- 13.4 Submit a summary report of events resulting from operation of Source ID 3 or 4 out of the low NO_x mode in the Operating Report required in condition 53.

[Construction Permit No. 091CP04 Preliminary, 11/04/02]
[18 AAC 50.350(g) - (i), 1/18/97]

Federal New Source Performance Standards, Subpart A (Source ID(s) 1 – 4)

- 14. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of Source ID(s) 1 – 4.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Regulation: 40 CFR 60.7(b), 7/1/99]

- 15. NSPS Subpart A Good Air Pollution Control Practice.** At all times including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate Source ID(s) 1 - 4 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the department which may include, but is not limited to, monitoring results, observations, review of operating and maintenance procedures, and inspection of the turbine(s).

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Regulation: 40 CFR 60.11(d), 7/1/99]

⁴ The dry low NO_x mode is determined through the absence of a P1 mode pilot flame.

- 16. NSPS Subpart A Concealment of Emissions.** The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of the standard set forth in condition 17. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Regulation: 40 CFR 60.12, 7/1/99]

Requirements Applicable to Subpart GG Turbines (Source ID(s) 1 – 4)

NO_x Emissions Limits

- 17.** The corrected exhaust gas concentration of NO_x shall not exceed;

- a. Subpart GG limit of 165 ppmvd for Source ID(s) 1 & 2, and
- b. Subpart GG limit of 181 ppmvd for Source ID(s) 3 & 4.

[18 AAC 50.040(a)(2)(V), 7/2/00]
[Federal Regulation: 40 CFR 60.332(a)(2), 7/1/99]

- 17.1 Waivers.** The permittee shall provide to the department a written copy of any U.S. EPA granted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules upon request by the department. The permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule with the permanent facility records.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Regulation: 40 CFR 60.8(b), 7/1/99]

Fuel Sulfur Content

- 18. NSPS Subpart GG Sulfur Standard.** The permittee shall comply with the fuel sulfur content standard in condition 18.1 below:

[18 AAC 50.040(a)(2)(V), 7/2/00]
[40 C.F.R. 60.333, Subpart GG, 7/1/99]

- 18.1** do not allow the sulfur content of the fuel burned in Source ID(s) 1 - 4 to exceed 0.8 percent by weight.

[40 C.F.R. 60.333(b), Subpart GG, 7/1/99]

- 18.2** Monitoring – Monitor compliance annually with the standard listed in this condition as follows:

[18 AAC 50.040(a)(2)(V), 7/2/00]
[40 C.F.R. 60.334 & 60.335, Subpart GG, 7/1/99]

-
- a. Determine compliance with the fuel sulfur content standard in condition 18.1 as follows:

[40 C.F.R. 60.335(d), 7/1/99]

- (i) For gaseous fuels, determine the sulfur content of the fuel using ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association (GPA) method 2377-86.
- b. The fuel sulfur analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 C.F.R. 60.335(e), 7/1/99]

18.3 Recordkeeping – Keep records of analysis as required by condition 18.2a(i).

18.4 Reporting –

- a. Submit a summary of the analytical results required by condition 18.2 with the facility operating report required by condition 53.
- b. Report per condition 51 when the emission limits in condition 18.1 is exceeded.

[18 AAC 50.350(i), 7/2/00]

Section 6. Facility-Wide Requirements

Hydrogen Sulfide Fuel Sulfur Limit

- 19.** Use a grade of diesel fuel that limits sulfur content to 0.25 percent or less by weight.

19.1 Monitor, record, and report according to condition 6.1

[Construction Permit No. 0123-AC011, 7/18/01]

[18 AAC 50.335(g), 1/18/97]

[18 AAC 50.350(g) – (i), 1/18/97]

- 20.** The permittee shall use natural gas fuel with a hydrogen sulfide (H₂S) content not to exceed 200 ppm.

20.1 Monitor, record, and report according to condition 6.2

[Construction Permit No. 0123-AC011, 7/18/01]

[18 AAC 50.335(g), 1/18/97]

[18 AAC 50.350(g) – (i), 1/18/97]

Placement of Non-Road Engines on Platform

- 21.** For planned events, notify the department 30 days prior to placing non-road engines greater than 1045 hp total cumulative rating upon the Tyonek Platform. For unplanned events, notify the department 3 days prior to placing non-road engines greater than 1045 hp total cumulative rating upon the platform. In the notice, provide the unit size, model, anticipated date of installation, intended purpose of the engine, and anticipated date of engine removal.

[Construction Permit No. 0123-AC011, 7/18/01]

- 22.** Within 30 days after receiving a department request, conduct an ambient impact assessment of platform operations in conjunction with non-road engine operations as described in 18 AAC 50.215(b).

[Construction Permit No. 0123-AC011, 7/18/01]

Section 7. Insignificant Sources

This section contains the requirements that the permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant sources that the department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to insignificant sources.

23. For Source ID(s) 13 – 15, 24, 25, 28, 33 and 34 and for sources at the facility that are insignificant as defined in 18 AAC 50.335(q)-(v) that are not listed on this permit, the following apply:

23.1 the permittee shall submit the compliance certifications of condition 54 based on reasonable inquiry;

23.2 the permittee shall comply with the requirements of condition 34;

23.3 the permittee shall report in the operating report required by 53 if a source listed in this condition because of actual emissions less than the thresholds of 18 AAC 50.335(r) has actual emissions greater than any of those thresholds;

23.4 no other monitoring, record keeping, or reporting is required, except as stated in conditions 6, 10, and 12.

[18 AAC 50.346(b)(1), 5/3/02]

24. The permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by any of the following;

a. more than 20 percent for more than three minutes in any one hour⁵,

[18 AAC 50.055(a)(1), 1/18/97 & 40 CFR 52.70, 11/18/98]

b. more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.055(a)(1), 5/3/02]

25. The permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

⁵ See Footnote #1.

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- 26.** The permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

Section 8. Generally Applicable Requirements

- 27. Asbestos NESHAP.** The permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97]
[Federal Citation: 40 C.F.R. 61, Subpart M, 12/19/96]

- 28. Refrigerant Recycling and Disposal.** The permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97]
[Federal Citation: 40 C.F.R. 82, Subpart F, 7/1/97]

- 29. Good Air Pollution Control Practice.** The permittee shall do the following for source ID(s) 8 - 12, 20, 21 and 37 - 39

29.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

29.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format;

29.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.346(b)(2), 5/3/02]

- 30. Dilution.** The permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a), 1/18/97]

- 31. Open Burning.** The permittee shall not conduct open burning at the facility.

[18 AAC 50.335(g), 1/18/97]

- 32. Bulk Materials Handling, Construction and Industrial Activities.** The permittee shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air as a result of industrial activities, construction projects, or the handling, transportation, and storage of bulk materials.

[18 AAC 50.040(e), 7/2/00, 18 AAC 50.045(d) & 18 AAC 50.350(d)(1), 1/18/97]

- 33. Stack Injection.** The permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the department.

[18 AAC 50.055(g) & 18 AAC 50.310(m), 1/18/97]

- 34. Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

18 AAC 50.110; 5/26/72]

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- 34.1 If emissions present a potential threat to human health or safety, the permittee shall report any such emissions according to condition 51.
- 34.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the permittee shall investigate the complaint to identify emissions that the permittee believes have caused or are causing a violation of condition 34.
- 34.3 The permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
- after an investigation because of a complaint or other reason, the permittee believes that emissions from the facility have caused or are causing a violation of condition 34; or
 - the department notifies the permittee that it has found a violation of condition 34.
- 34.4 The permittee shall keep records of
- the date, time, and nature of all emissions complaints received;
 - the name of the person or persons that complained, if known;
 - a summary of any investigation, including reasons the permittee does or does not believe the emissions have caused a violation of condition 34; and
 - any corrective actions taken or planned for complaints attributable to emissions from the facility.
- 34.5 With each facility operating report under condition 53, the permittee shall include a brief summary report which must include
- the number of complaints received;
 - the number of times the permittee or the department found corrective action necessary;
 - the number of times action was taken on a complaint within 24 hours; and
 - the status of corrective actions the permittee or department found necessary that were not taken within 24 hours.
- 34.6 The permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.350(g) – (i), 1/18/97 & 18 AAC 50.346(a)(2), 5/3/02]

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- 35. Technology-Based Emission Standard.** If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard, the permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard.

[18 AAC 50.235(a) & 18 AAC 50.350(f)(3), 1/18/97]

- 36. Permit Renewal.** To renew this permit, the permittee shall submit an application under 18 AAC 50.335 no sooner than April 17, 2006 and no later than April 17, 2007 to renew this permit.

[18 AAC 50.335(a), 1/18/97]

Section 9. General Source Testing and Monitoring Requirements

- 37. Requested Source Tests.** In addition to any source testing explicitly required by the permit, the permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.345(k), 5/3/02]

- 38. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the permittee shall conduct source testing

38.1 At a point or points that characterize the actual discharge into the ambient air; and

38.2 At the maximum rated burning or operating capacity of the source or another rate determined by the department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & 18 AAC 50.350(g), 1/18/97]

- 39. Reference Test Methods.** The permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

39.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.040(a), 7/2/00, 18 AAC 50.220(c)(1)(A) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 60, 7/1/99]

39.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 18 AAC 50.220(c)(1)(B) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 61, 12/19/96]

39.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00; 18 AAC 50.220(c)(1)(C) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, 7/1/99]

39.4 Source testing for reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method-9.

[18 AAC 50.030, 12/30/00; 18 AAC 50.220(c)(1)(D) & 18 AAC 50.350(g), 1/18/97]

39.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 7/2/00; 18 AAC 50.220(c)(1)(E) & 18 AAC 50.350(g), 1/18/97]

[Federal Citation: 40 C.F.R. 60, Appendix A, 7/1/99]

39.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M.

[18 AAC 50.035, 7/2/00; 18 AAC 50.220(c)(1)(F) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 51, Appendix M, 7/1/99]

39.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the department in accordance with Method 301 in Appendix A to 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00; 18 AAC 50.220(c)(2) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, Appendix A, Method 301, 7/1/99]

40. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 18 AAC 50.350(g), 1/18/97 & 18 AAC 50.990(88), 5/3/02]

41. Test Deadline Extension. The permittee may request an extension to a source test deadline established by the department. The permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the department's appropriate division director or designee.

[18 AAC 50.345(l), 5/3/02]

42. Test Plans. Except as provided in condition 45, before conducting any source tests, the permittee shall submit a plan to the department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the permittee will document that operation. The permittee shall submit a complete plan within 60 days after receiving a request under condition 37 and at least 30 days before the scheduled date of any test unless the department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(m), 5/3/02]

43. Test Notification. Except as provided in condition 45, at least 10 days before conducting a source test, the permittee shall give the department written notice of the date and the time the source test will begin.

[18 AAC 50.345(n), 5/3/02]

44. Test Reports. Except as provided in condition 45, within 60 days after completing a source test, the permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The permittee shall certify the results in the manner set out in condition 47. If requested in writing by the department, the permittee must provide preliminary results in a shorter period of time specified by the department.

[18 AAC 50.345(o), 5/3/02]

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- 45. Test Exemption.** The permittee is not required to comply with conditions 42, 43 and 44 (Test Plans, Test Notifications and Test Reports) when the exhaust is observed for visible emissions using Method 9.

[18 AAC 50.345(a), 5/3/02]

- 46. Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in conditions 5 and 25, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Section 10. General Recordkeeping, Reporting, and Compliance Certification Requirements

- 47. Certification.** The permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.” Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

[18 AAC 50.345(j), 10/1/04]

- 48. Submittals.** Unless otherwise directed by the department or this permit, the permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

- 49. Information Requests.** The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept by the permit. The department may require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(i), 5/3/02]

- 50. Recordkeeping Requirements.** The permittee shall keep all records required by this permit for at least five years after the date of collection, including

50.1 Copies of all reports and certifications submitted pursuant to this section of the permit.

50.2 Records of all monitoring required by this permit, and information about the monitoring including

- a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
- b. sampling dates and times of sampling or measurements;
- c. the operating conditions that existed at the time of sampling or measurement;
- d. the date analyses were performed;
- e. the location where samples were taken;

- f. the company or entity that performed the sampling and analyses;
- g. the analytical techniques or methods used in the analyses; and
- h. the results of the analyses.

[18 AAC 50.350(h), 1/18/97]

51. Excess Emissions and Permit Deviation Reports.

51.1 Except as provided in condition 34, the permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs or was discovered, except as provided in conditions 51.1c(ii) and 51.1c(iii);
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under condition 51.1c(i); and
 - (iii) for failure to monitor, as required in other applicable conditions of this permit.

51.2 When reporting excess emissions, the permittee must report using either the department's online form, which can be found at <http://www.state.ak.us/dec/dawq/aqm/eeform.pdf>, or, if the permittee prefers, the form contained in Section 17 of this permit. The permittee must provide all information called for by the form that is used.

51.3 When reporting a permit deviation, the permittee must report using the form contained in Section 17 of this permit. The permittee must provide all information called for by the form.

- 51.4 If requested by the department, the permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.346(a)(3), 5/3/02]

52. NSPS and NESHAP Reports. The permittee shall:

- 52.1 attach to the facility operating report required by condition 53, copies of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 as required by condition 27, unless copies have already been provided to the department at the time submitted to EPA, and

- 52.2 provide the department a copy of any EPA-granted waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules upon request.

[18 AAC 50.040, 7/2/00 & 18 AAC 350(i)(2), 1/18/97]
[Federal Citation 40 C.F.R. 60 & 40 C.F.R. 61, 7/1/99]

53. Operating Reports. During the life of this permit, the permittee shall submit an original and two copies of an operating report by April 30 for the period January 1 to March 31, by July 30 for the period April 1 to June 30, by October 30 for the period July 1 to September 30, and by February 15 for the period October 1 to December 31. Send reports to the ADEC office listed in condition 48.

- 53.1 The operating report must include all information required to be in operating reports by other conditions of this permit.

- 53.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 53.1, either

a. The permittee shall identify

- (i) the date of the deviation;
- (ii) the equipment involved;
- (iii) the permit condition affected;
- (iv) a description of the excess emissions or permit deviation; and
- (v) any corrective action or preventive measures taken and the date of such actions; or

- b. when excess emissions or permit deviations have already been reported under condition 51 the permittee may cite the date or dates of those reports.

[18 AAC 50.346(b)(3), 5/3/02]

54. Annual Compliance Certification. For periods after the effective date of this permit, each year by March 31, the permittee shall compile and submit to the department an original and two copies of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

54.1 For each permit term and condition set forth in Section 3 through Section 10 and Section 13 including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4), 1/18/97]

- a. certify the compliance status over the preceding calendar year, except for period prior to the effective date of this permit, consistent with the monitoring required by this permit;
- b. state whether compliance is intermittent or continuous;
- c. briefly describe each method used to determine the compliance status; and
- d. notarize the responsible official's signature.

[18 AAC 50.345(j), 5/3/02]

54.2 Submit a copy of the report directly to the U.S. EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

Section 11. Standard Conditions Not Otherwise Included in the Permit

- 55.** The permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

55.1 an enforcement action;

55.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

55.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(c), 5/3/02]

- 56.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(d), 5/3/02]

- 57.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(e), 5/3/02]

- 58.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are

58.1 included and specifically identified in the permit, or

58.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(b), 5/3/02]

- 59.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(f), 5/3/02]

- 60.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(g), 5/3/02]

- 61.** The permittee shall allow the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

61.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

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- 61.2 have access to and copy any records required by the permit;
 - 61.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and
 - 61.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(h), 5/3/02]

Section 12. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the facility application, this section of the permit contains the requirements determined by the department not to be applicable to the permitted facility.

- 62.** The table below identifies the sources that are not subject to the specified requirements at the time of permit issuance. Some of the requirements listed below may become applicable during the permit term due to an invoking event, even though the requirement is deemed inapplicable at the time of permit issuance.

Table 2. Inapplicable Requirements

Shield requested for:	Reason for shield decision
Turbines (Source ID(s) 1 - 4)	
40 C.F.R. 60 Subpart A, Notification and recordkeeping, 60.7(a)(1), (a)(2) and (a)(3)	Requirements were one time only requirements and are no longer applicable
40 C.F.R. 60 Subpart A, Notification and recordkeeping, 60.7 (a)(5) and (a)(7)	No continuous monitoring systems at the facility. Notifications apply to startup conditions only and would not be applicable to operation.
40 C.F.R. 60 Subpart A, Performance tests 60.8	Requirements were one-time only requirements and are no longer applicable.
40 C.F.R. 60 Subpart GG, Standard for Nitrogen Oxides 60.332(a)(1)	No affected sources within facility
40 C.F.R. 60 Subpart GG, Standard for Sulfur Dioxide 60.333(a)	Owner/Operator must comply with 60.333(a) or (b). Phillips has chosen to comply with 60.333(b).
40 C.F.R. 60 Subpart GG, Monitoring of operations 60.334(a) and (c)(1)	Requirement applies only to turbines using water injection to control NO _x (not required of turbines at Tyonek Platform)
Facility Wide	
40 C.F.R. 60 Subparts B, C, Ca, Cb, F, G, H, I, J, M, N, Na, O, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, BBB, DDD, FFF, GGG, HHH, III, JJJ, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, and VVV	Not an affected facility, operation or industry
40 C.F.R. 60 Subparts D, Da, Db, Dc, E, Ea, Eb, K, Ka, Kb, L, P, Q, R, DD, and AAA	No affected sources within facility
40 C.F.R. 60 Subparts KKK and LLL	Tyonek Platform is an offshore facility
40 C.F.R. 61 Subparts B, C, D, E, F, H, I, K, L, N, O, P, Q, R, T, W, Y, BB, and FF	Not an affected facility, operation, or industry
40 CFR 61.152, Subpart M	The facility does not use air cleaning equipment.
40 C.F.R. 61 Subpart J	Facility does not contain any equipment in benzene service
40 C.F.R. 61 Subpart M	Per Federal Regulation: 40 CFR 61.140, a facility must be a source specified in 61.142 through 61.151, 61.154, or 61.155 to be subject to Subpart M
40 C.F.R. 61 Subpart A	Per Federal Regulation: 40 CFR 61.01(c), a facility must be subject to a specific subpart of Federal Regulation: 40 CFR 61 to be subject to Subpart A
40 C.F.R. 61 Subpart V	Per Federal Regulation: 40 CFR 61.240(b), a facility must be subject to a specific subpart of Federal

Shield requested for:	Reason for shield decision
	Regulation: 40 CFR 61 to be subject to Subpart V
40 C.F.R. 63 Subparts F, G, M, O, R, T, W, X, Y, CC and EE	Not an affected facility, operation or industry
40 C.F.R. 63 Subparts L, N, Q, OO, PP, RR and VV	No affected sources within facility
40 C.F.R. 63 Subpart A	Per Federal Regulation: 40 CFR 63.1(a)(4), a facility must be subject to a specific subpart of Federal Regulation: 40 CFR 63 to be subject to Subpart A
40 C.F.R. 63 Subpart H	Per Federal Regulation: 40 CFR 63.160(a), a facility must be subject to specific subpart of Federal Regulation: 40 CFR 63 to be subject to Subpart H
40 C.F.R. 63 Subpart HH	The Tyonek Platform is not a major source as defined under subpart HH.
40 C.F.R. 63 Subpart HHH	The Tyonek Platform operates prior to the point of custody transfer and is not a major source of hazardous air pollutants as defined in subpart HHH.
40 CFR 64	The Tyonek Platform does not use a control device to achieve compliance with any emission limitation or standard.
40 CFR 68	The Tyonek Platform, a crude petroleum and natural gas production facility, (NAICS code 211111) does not process or store regulated flammable or toxic substances in excess of threshold quantities. "Naturally occurring hydrocarbon mixtures" (crude oil, condensate, natural gas and produced water) prior to entry into a petroleum refining process unit (NAICS code 32411) or a natural gas processing plant (NAICS code 211112) are exempt from the threshold determination. No other mixtures containing regulated flammable substances stored at the facility meet the criteria for an NFPA rating of 4 for flammability. Therefore, all materials stored at the facility are exempt from the threshold determination.
40 C.F.R. 82 Subpart A	The Tyonek Platform does not produce, transform, destroy, import or export Class I, or Group I or II substances or products.
40 C.F.R. 82 Subpart B	Motor vehicles are not serviced on site
40 C.F.R. 82 Subpart C and E	The Tyonek Platform does not manufacture or distribute Class I or II products or substances.
40 C.F.R. 82 Subpart D	This subpart does not apply to the facility. It applies only to Federal departments, agencies, and instrumentalities.
40 C.F.R. 82 Subpart F, Appendix C	The Tyonek Platform is not a third party entity that certifies recovery equipment.
40 C.F.R. 82 Subpart F, Appendix D	The Tyonek Platform does not have a technician certification program.
40 C.F.R. 82 Subpart G	EPA has determined that the Significant New Alternatives Policy (SNAP) rule need not be included in the Title V permit.
40 C.F.R. 82.158	The Tyonek Platform does not manufacture or import recovery and recycling equipment.
40 C.F.R. 82.160	The Tyonek Platform does not contract equipment testing organizations to certify recovery and recycling equipment.
40 C.F.R. 82.164	The Tyonek Platform does not sell reclaimed

Shield requested for:	Reason for shield decision
	refrigerants.
18 AAC 50.050, Incinerator Emission Standards	No affected sources within facility
18 AAC 50.055(a)(2), Fuel Burning equipment standards, opacity emission limit of 30%, 3-minute average	No affected sources within facility
18 AAC 50.055(a)(3), Fuel Burning equipment standards, opacity emission limit of 55% for a urea prilling tower	The Tyonek Platform does not have a urea prilling tower.
18 AAC 50.055(a)(4), (5) and (8), Fuel burning equipment standards, opacity emission limit of 20%, 6-minute average	No affected sources within facility
18 AAC 50.055(a)(6) and (7), Fuel burning equipment standards, opacity emission limit of 10%, 6-minute average	No affected sources within facility
18 AAC 50.055(a)(9), Fuel Burning equipment standards, opacity emission limit of 20% for more than three minutes in any one hour for a coal-burning boiler.	The Tyonek Platform does not have a coal-fired boiler.
18 AAC 50.055(b)(2) and (3), Fuel burning equipment standards, PM emission limit of 0.1 grains per cubic foot	No affected sources within facility
18 AAC 50.055(b)(4), Fuel burning equipment standards, PM emission limit of 0.15 grains per cubic foot	No affected sources within facility
18 AAC 50.055(d) and (e), Fuel burning equipment standards	No affected sources within facility
18 AAC 50.055(b)(5) and (6), Fuel burning equipment standards	No affected sources within facility
18 AAC 50.060, Pulp Mills	Not an affected facility, operation or industry
18 AAC 50.065, Open Burning	Open burning not conducted at the facility
18 AAC 50.070 Marine Vessels, visible emission standards	Facility is more than 3 miles from shore
18 AAC 50.075, Wood fired heating device emission standards	No affected sources within facility
18 AAC 50.085, Volatile liquid storage tank emission standards	Regulations only apply to tanks within the Port of Anchorage
18 AAC 50.090 Volatile liquid loading racks and delivery emission standards	Regulations only apply to facilities within the Port of Anchorage

[18 AAC 50.350(l), 1/18/97]

Section 13. Visible Emissions and Particulate Matter Monitoring Plan

For Diesel-Fired Engines (Source ID(s) 20 and 21)

63. Visible Emissions Monitoring and Reporting. The permittee shall perform the following visible emission monitoring and reporting for Source ID(s) 20 and 21 as follows:

63.1 Visible Emissions Monitoring – The permittee shall perform an annual Method 9 visible emissions observation. The observation shall be conducted for 18 minutes to obtain 72 individual readings at 15-second intervals. If 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent, the permittee shall perform corrective action under condition 64.

63.2 Visible Emissions Reporting – the permittee shall include in the facility operating report required under condition 53 a summary of the results of all Method 9 readings performed under condition 63.1.

64. Corrective Actions. If required under condition 63.1, perform corrective action within 14 days and conduct a follow-up Method 9 observation under condition 63.1 within 30 days of completing the corrective action.

64.1 Record keeping – if applicable, keep a written record of the starting date, the completion date, and a description of any actions taken under condition 64 to reduce visible emissions.

64.2 Reporting – submit with the facility operating report required under condition 53 copies of any records required under condition 64.1.

65. Particulate Matter Monitoring and Reporting. The permittee shall conduct source tests on Source ID(s) 20 and 21 to determine the concentration of PM in the exhaust as follows:

65.1 PM Monitoring – except as provided in condition 65.3, conduct a PM source test according to the requirements set out in Section 9 no later than 120 calendar days after the first follow-up Method 9 observation performed under condition 63.1 results in an 18-minute average opacity greater than 20 percent.

65.2 During each PM source test, perform a visible emission evaluation in accordance with condition 63.1 and submit a summary of the results to the department with the PM source test report in accordance with condition 44.

65.3 The automatic PM source test requirement in condition 65.1 is waived for an emission unit if

- a. a PM source test on that unit has shown compliance with the PM standard since permit issuance, or

- b. if a follow-up visible emission observation conducted using Method-9 during the 120 days shows that the situation described in condition 65.1 no longer occurs.
- 66. PM Reporting – the permittee shall report as excess emissions under condition 53 any time the results of a source test for PM exceed the PM emission limit stated in condition 5.
[18 AAC 50.335(g) & 50.350(g) – (i), 1/18/97]

Flares (Source ID(s) 37 – 39)

- 67. **Visible Emissions Monitoring, Recordkeeping, and Reporting.** The permittee shall observe the first six daylight flare events⁶ occurring during the life of this permit⁷.
 - 67.1 Monitor flare events using Method-9 for 18 minutes to obtain 72 individual 15-second readings.
 - 67.2 Record the following information for observed events:
 - a. the flare(s) Source ID number;
 - b. results of the Method-9 observations;
 - c. reason(s) for flaring;
 - d. date, beginning and ending time of event; and
 - e. cumulative volume of gas flared.
 - 67.3 Until monitoring has been completed on the six flare events described in this condition, the permittee shall either monitor each qualifying flare event or include in the next report required by condition 53 an explanation of the reason the event was not monitored. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available.
 - 67.4 Attach copies of the records required by condition 67.2 with the facility operating report required by condition 53.
 - 67.5 Report under condition 51 whenever the opacity standard in condition 4 is exceeded.
[18 AAC 50.350(g) – (i), 1/18/97]

⁶ For purposes of this permit, a “flare event” is flaring of gas for greater than one hour as a result of scheduled lease operations, i.e. maintenance or well testing activities. It does not include non-scheduled lease operations, i.e. process upsets, emergency flaring, or de minimis venting of gas incidental to normal operations.

⁷ Flare events monitored within 12-months prior to permit effective date may count towards the six-event total.

Section 14. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

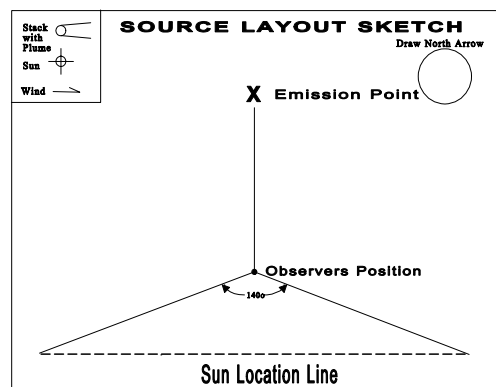
Company: _____

Location: _____

Test No.: _____ Date: _____

Source: _____

Production Rate or Operating Rate _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Page ____ of ____

Test Number _____ Clock time _____

[illegible]

Observer Signature

Number of Observations exceeding 20% _____

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 15. SO₂ Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

Diesel Fuel

$$A = 31,200 \times [\text{wt}\%S_{\text{fuel}}] = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$B = 0.148 \times [\text{wt}\%S_{\text{fuel}}] = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$C = 0.396 \times [\text{wt}\%C_{\text{fuel}}] = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$D = 0.933 \times [\text{wt}\%H_{\text{fuel}}] = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$E = B + C + D = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$F = 20.9 - [\text{vol}\%_{\text{dry}}O_{2,\text{exhaust}}] = 20.9 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$G = [\text{vol}\%_{\text{dry}}O_{2,\text{exhaust}}] \div F = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$H = 1 + G = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$I = E \times H = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\text{SO}_2 \text{ concentration} = A \div I = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ PPM}$$

The **wt%S_{fuel}**, **wt%C_{fuel}**, and **wt%H_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition 6.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%_{dry}O_{2,exhaust}**) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S_{fuel}** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%_{dry}O_{2,exhaust}** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 5/3/02]

Section 16. Emission Factors

The emission factors in the following tables are to be used to calculate emission rates for the sources listed in the tables in accordance with condition 12.

NOx Emissions

A	B	C	D	E
Source	Combustion	NO _x Emission	Input/Output	Maximum NO _x
ID #	Source	Factor	Parameter	Emission Rate
1	Solar Centaur T-4700 Turbine #1	0.426 lb/MMBtu	47,660 MBtu/hr	20.3 lb/hr
2	Solar Centaur T-4700 Turbine #2	0.426 lb/MMBtu	47,660 MBtu/hr	20.3 lb/hr
8	Waukesha L-7042G Engine #1	2 g/hp-hr	604 kW	3.57 lb/hr
9	Waukesha L-7042G Engine #4	2 g/hp-hr	604 kW	3.57 lb/hr
10	Glycol Heater #1	100 lb/MMscf	11,148 MBtu/hr	1.11 lb/hr
11	Glycol Heater #2	100 lb/MMscf	11,148 MBtu/hr	1.11 lb/hr
12	Glycol Heater #3	100 lb/MMscf	11,148 MBtu/hr	1.11 lb/hr
13	Glycol Regenerator #1	94 lb/MMscf	246 MBtu/hr	0.023 lb/hr
14	Glycol Regenerator #2	94 lb/MMscf	246 MBtu/hr	0.023 lb/hr
15	Glycol Regenerator #3	94 lb/MMscf	246 MBtu/hr	0.023 lb/hr
20	Caterpillar D-398 Engine #1	0.45 lb/gall	560 kW	18.0 lb/hr
21	Caterpillar D-398 Engine #2	0.45 lb/gal	560 kW	18.0 lb/hr
24	Manitowoc Crane	0.62 lb/gal	230 hp	7.9 lb/hr
25	Unit Crane	0.62 lb/gal	230 hp	7.9 lb/hr
28	John Deere 4039 Engine	0.58 lb/gal	80 hp	2.5 lb/hr
33	Firewater Engine #1	0.51 lb/gal	231 hp	6.2 lb/hr
34	Firewater Engine #2	0.51 lb/gal	231 hp	6.2 lb/hr
37	HP/LP Flare Pilots	0.068 lb/MMBtu	125 MBtu/hr	0.0085 lb/hr
38	HP Safety Flare	0.068 lb/MMBtu	583,333 MBtu/hr	39.7 lb/hr
39	LP Safety Flare	0.068 lb/MMBtu	53,300 MBtu/hr	4.0 lb/hr

- Notes:
1. For Sources 8, 9, 13-15, and 37, calculate emissions based on the hours of operation, maximum input/output parameter (D), and the NO_x emission factor (C).
 2. For sources 20, 21, 24, 25, 28, 33, and 34, calculate emissions based on the NO_x emission factor (C) and fuel consumption.
 3. For Sources 1, 2, 10-12, and 38-39, calculate emissions based on the NO_x emission factor (C), fuel consumption, and heating value of the fuel (Note 4), or as indicated in Note 1.
 4. Use a heating value of 1,007 Btu/scf unless an alternative has been measured for Tyonek natural gas and provided to the department in the Facility Operating Report.
 5. Use the listed NO_x emission factors, department-approved site-specific NO_x emission factors from results of source tests, or NO_x emission limits determined by continuous emissions monitoring systems if required by the permit.
 6. The emissions inventory accounts for the Phillips Tyonek NCIU 1999 Project source inventory and does not account for emissions from Sources No. 3 and 4.

CO Emissions

A	B	C		D		E	
Source	Combustion	CO Emission		Input/Output		Maximum CO	
ID #	Source	Factor		Parameter		Emission Rate	
1	Solar Centaur T-4700 Turbine #1	0.109	lb/MMBtu	47,660	MBtu/hr	5.2	lb/hr
2	Solar Centaur T-4700 Turbine #2	0.109	lb/MMBtu	47,660	MBtu/hr	5.2	lb/hr
8	Waukesha L-7042G Engine #1	5.4	g/hp-hr	604	kW	9.64	lb/hr
9	Waukesha L-7042G Engine #4	5.4	g/hp-hr	604	kW	9.64	lb/hr
10	Glycol Heater #1	84	lb/MMscf	11,148	MBtu/hr	0.94	lb/hr
11	Glycol Heater #2	84	lb/MMscf	11,148	MBtu/hr	0.94	lb/hr
12	Glycol Heater #3	84	lb/MMscf	11,148	MBtu/hr	0.94	lb/hr
13	Glycol Regenerator #1	40	lb/MMscf	246	MBtu/hr	0.01	lb/hr
14	Glycol Regenerator #2	40	lb/MMscf	246	MBtu/hr	0.01	lb/hr
15	Glycol Regenerator #3	40	lb/MMscf	246	MBtu/hr	0.01	lb/hr
20	Caterpillar D-398 Engine #1	0.10	lb/gal	560	kW	4.1	lb/hr
21	Caterpillar D-398 Engine #2	0.10	lb/gal	560	kW	4.1	lb/hr
24	Manitowoc Crane	0.67	lb/gal	230	hp	8.5	lb/hr
25	Unit Crane	0.67	lb/gal	230	hp	8.5	lb/hr
28	John Deere 4039 Engine	0.13	lb/gal	80	hp	0.53	lb/hr
33	Firewater Engine #1	0.045	lb/gal	231	hp	0.54	lb/hr
34	Firewater Engine #2	0.045	lb/gal	231	hp	0.54	lb/hr
37	HP/LP Flare Pilots	0.37	lb/MMBtu	125	MBtu/hr	0.046	lb/hr
38	HP Safety Flare	0.37	lb/MMBtu	583,333	MBtu/hr	216	lb/hr
39	LP Safety Flare	0.37	lb/MMBtu	53,300	MBtu/hr	21.6	lb/hr

- Notes:
1. For Sources 8, 9, 13-15, and 37, calculate emissions based on the hours of operation, maximum input/output parameter (D), and the CO emission factor (C).
 2. For sources 20, 21, 24, 25, 28, 33, and 34, calculate emissions based on the CO emission factor (C) and fuel consumption.
 3. For Sources 1, 2, 10-12, and 38-39, calculate emissions based on the CO emission factor (C), fuel consumption, and heating value of the fuel (Note 4), or as indicated in Note 1.
 4. Use a heating value of 1,007 Btu/scf unless an alternative has been measured for Tyonek natural gas and provided to the department in the Facility Operating Report.
 5. The emissions inventory accounts for the Phillips Tyonek NCIU 1999 Project source inventory and does not account for emissions from Sources No. 3 and 4.

Section 17. ADEC Notification Form

Fax this form to: (907) 451-2187 Telephone: (907) 451-5173

ConocoPhillips Company
Company Name

Tyonek Platform
Facility Name

Reason for notification:

☐ **Excess Emissions**
*If you checked this box
Fill out section 1*

☐ **Other Deviation from Permit Condition**
*If you checked this box
fill out section 2*

When did you discover the Excess Emissions or Other Deviation:

Date: __/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock):

	START Time: (hr:min):	END Time:	Duration
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
		Total:	_____:

(b) Cause of Event (Check all that apply):

☐ START UP ☐ UPSET CONDITION ☐ CONTROL EQUIPMENT
☐ SHUT DOWN ☐ SCHEDULED MAINTENANCE ☐ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?

☐ YES ☐ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

☐ YES ☐ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation
_____	_____
_____	_____
_____	_____

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____

Signature: _____

_____ Date

Alaska Department of Environmental Conservation

Air Permits Program

September 18, 2002

Revision 1, Final April 28, 2003

ConocoPhillips Company

Tyonek Platform

STATEMENT OF BASIS

of the Terms and Conditions for

Permit No. 091TVP01

Prepared by Robert Dolan & Grace Germain

Revision 2 prepared by Robert Dolan, DATE

INTRODUCTION

This document sets forth the Statement of Basis for the terms and conditions of Operating Permit No. 091TVP01.

The Tyonek Platform is an offshore oil and gas production platform that produces natural gas and transports it to the Phillip's Kenai Liquefied Natural Gas Plant in Nikiski, Alaska. The facility is owned and operated by ConocoPhillips Company. ConocoPhillips Company is the permittee for the facility's operating permit.

PROCESS DESCRIPTION

As provided in the application, the facility contains both natural gas and diesel fired sources. There are four natural gas-fired turbines, two natural gas-fired engines, six natural gas-fired heaters, two gas flares (each of which are equipped with a pilot), seven diesel fired engines and one set of gas flare pilots. Some of these sources are deemed insignificant by regulation and do not have requirements in this permit that specifically relate to them.

The sources at the facility regulated in Operating Permit No. 091TVP01 are identified in Table 1 in Section 4 of the permit.

REVISION 2

On dated December 1, 2004 ConocoPhillips requested a revision Operating Permit 091TVP01 Revision 1. Under 40 CFR 71.7(e)(3) the ConocoPhillips request constitutes a significant modification of the existing permit and requires both public notice and EPA review. The revisions consist of the following:

- 1) Removal of the nitrogen oxide emissions monitoring for Solar Turbines, Source IDs 1 through 4, as identified in the permit. Justification for removal of the monitoring is a federal regulatory change restricting states authority to create gap-filling monitoring when it is not already present in federal regulations. Specifically, 40 CFR Parts 70 and 71 were revised on January 22, 2004.
- 2) A footnote has been added to condition 11 to clarify that fuel meters may be shared by emission units when they are identically rated units. This clarification reflects current practice on the platform.

SOURCE INVENTORY AND DESCRIPTION

Section 4 of Operating Permit No. 091TVP01 contains Table 1 describing the sources regulated by the permit. The table is provided for information and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Table 1. Emissions Summary

Pollutant	NO _x	CO	PM-10	SO ₂	VOC
Potential Emissions (TPY) per AS 46.14.990(21)	294	268	44	44	69
Assessable Potential to Emit (TPY) under condition 2.2	294	268	44	44	69

The emission levels in Table 1 were derived using vendor data, source tests data, AP-42 values and material balances to estimate potential to emit.

The assessable potential to emit is simply those regulated air contaminants for which the facility has the potential to emit quantities greater than 10 tons per year.

BASIS FOR REQUIRING AN OPERATING PERMIT

Tyonek Platform requires an operating permit in accordance with 18 AAC 50.325(b)(1) because it has the potential to emit 100 tons per year (tpy) or more of a regulated air contaminant. Tyonek Platform contains equipment with a rated capacity of 100 MMBtu/hr and is classified under 18 AAC 50.300(b)(2) as having the potential of violating one or more of the ambient air quality standards and hence needs an operating permit under 18 AAC 50.325(c). Tyonek Platform also contains equipment (turbines) subject to 40 CFR 60 Subpart GG, which requires the facility to have an operating permit under 18 AAC 50.325(b)(3). Tyonek Platform is also a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300(c)(1) because it has the potential to emit more than 250 tpy of a regulated air contaminant in an area classified as attainment or unclassifiable. The Tyonek Platform underwent PSD review during the installation of the two turbines sources 3 and 4 listed in Table 1 of Permit No. 091TVP01.

Alaska regulations require operating permit applications to include identification of “regulated sources.” As applied to Tyonek Platform, the state regulations require a description of:

Each incinerator, including a demonstration showing each requirement in 18 AAC 50.050, Incinerator Emissions Standards, that applies [18 AAC 50.335(e)(4)(A)];

Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment [18 AAC 50.335(e)(4)(C)];

Each source subject to a standard adopted by reference in 18 AAC 50.040 [18 AAC 50.335(e)(2)]; and

Sources subject to requirements in an existing DEC permit [18 AAC 50.335(e)(5)]

The emission sources at Tyonek Platform classified as “regulated sources” according to the above DEC regulations are listed in Table 1 of Permit No. 091TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent operating permit issued for this facility is Permit-to-Operate No. 9623-AC007. This permit-to-operate includes all construction authorizations issued through April 14, 1997. All facility-specific requirements established in this previous permit are included in the new operating permit as described below.

Construction Permits

Construction Permit No. 9923-AC011 was issued to this facility September 8, 1999. Construction Permit No. 0023-AC007 was issued to this facility on June 6, 2000 and replaced the previous construction permit. Construction Permit No. 0123-AC011 was issued to this facility on July 18, 2001 and replaced the previous construction permit. The preliminary decision for Construction Permit No. 091CP04 will be public noticed concurrently with Revision 1 to this operating permit. The facility-specific requirements established in these permits are included in the operating permit as described in the legal and factual basis for permit terms and conditions below.

Title-V Operating Permit Application History

The owner or operator submitted an application in October 1997.

The department determined the application complete in December 1997.

The Department issued Title V Operating permit No. 091TVP01 on September 18, 2002.

COMPLIANCE HISTORY

The facility has operated at its current location since 1968. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its operating permit.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

18 AAC 50.350(d)(1)(D) requires that this permit include each facility specific requirement established in prior permit 9623-AA007. Table 2 below lists the old requirement (condition) and the new condition that carries over the old requirement into the new permit.

Appendix 1 at the end of this statement of basis is an evaluation of the permit hygiene request submitted under 18 AAC 50.305(a)(3) as part of the facility Title V application.

Table 2. A comparison of pre-January 18, 1997 Permit No. 9623-AA007 facility-specific conditions to Permit No. 091TVP01 conditions. This table does not include standard and general conditions.

Permit No. 9623-AA007 condition	Description of Requirement	Permit No. 091TVP01 condition	How condition was revised
5	Burn only diesel fuel with sulfur content of no more than 0.5% by weight in sources 20-36	None	Not carried. More stringent condition from Construction Permit No. 0123-AC011 used, see Table 3 below
6	Waukesha generators shall operate with air-fuel controllers and catalytic converters	7	No change
7	Flare systems shall have flow controls and not allow liquids to flow to the flare	8	No change
9	Operate fuel burning equipment so its emissions do not exceed the Interim Annual Emission Limits...etc.	None	Not carried. Condition has been rescinded and replaced by conditions in Construction Permit No. 0123-AC011
16	Process monitors shall be installed, operated, and maintained	None	Not carried. Condition replaced by numerous individual conditions
18	Analyze for the hydrogen sulfide content of the fuel gas on a quarterly basis using Draeger Tube analysis.	20	The Draeger Tube method of analysis has been retained in condition 6.2 but the frequency has been reduced to semiannual from quarterly to match the schedule in other operating permits issued by ADEC. The department feels this frequency is adequate since variance over time of hydrogen sulfide is gradual.
19	Provide quarterly compliance demonstration that...emissions are not greater than Interim Annual Emission Limits	None	Not carried. Condition has been rescinded and replaced by conditions in Construction Permit No. 0123-AC011
21	Notify department ...within 24 hours...equipment failures...change in operations....that will effect emissions	None	Not carried. Condition has been rescinded and replaced by conditions in Construction Permit No. 0123-AC011
22	Submit a written report concerning condition 21 excess	None	Not carried. Condition has been rescinded and replaced by

Permit No. 9623-AA007 condition	Description of Requirement	Permit No. 091TVP01 condition	How condition was revised
	emissions		conditions in Construction Permit No. 0123-AC011
23	Notify the department if fuel gas hydrogen sulfide content exceeds 250 ppm...etc	None	Not carried. The department will use 200-ppm limit for hydrogen sulfide content and require Ambient Air Quality Analysis as needed.
25	Submit two copies of operating report	None	Not carried. Condition has been rescinded and replaced by conditions in Construction Permit No. 0123-AC011
29	Submit a complete application for a construction permit	None	Task has been completed

18 AAC 50.350(d)(1)(D) requires that this permit include each facility specific requirement established in prior Permit No. 0123-AC011. Table 3 below lists the old requirement (condition) and the new condition that carries over the old requirement into the new permit.

Table 3. A comparison of Permit No. 0123-AC011 facility-specific conditions to Permit No. 091TVP01 Rev. 1 conditions. This table does not include standard and general conditions.

Permit No. 0123-AC011 condition	Description of Requirement	Permit No. 091TVP01 Rev. 1 condition	How condition was revised
25	Remove the two Solar Centaur T-4002 Compressor turbines and replace with two refurbished Solar Centaur T-4700 turbines	None	Not carried, task completed 10/7/99.
28	Notification of department prior to placement of non-road engines with total cumulative rating of greater than 1,045 hp	21	No change
29	Conduct an ambient impact assessment of platform operations in conjunction with non-road engines	22	No change
30 - 32	Owner Requested Limits for PSD Avoidance		
30.1	PSD Avoidance Limit for fuel sulfur content	19, 20	No change

Permit No. 0123-AC011 condition	Description of Requirement	Permit No. 091TVP01 Rev. 1 condition	How condition was revised
30.2	PSD Avoidance Limit for hours of operation	9	Changed to limit equivalent NO _x emissions and removed source 18.
30.3	PSD Avoidance Limit for natural gas consumption	11	Changed gas consumption limit for sources 10, 11 and 12
30.4	PSD Avoidance Limit for diesel fuel consumption	9	Changed to limit equivalent NO _x emissions
30.5	Remove sources 4-7, 16, 17, 29, and 35 from platform	None	Task completed
30.6	Remove sources 3, 19, 22, 23, 26, 27, 30-32, and 36 from platform by 8/30/99	None	Task completed
31.1	Measure hydrogen sulfide content of natural gas fuel	20	No change
31.2	Monitor fuel use and hours of operation of fuel burning equipment	9.1, 11.1	No change
31.3	Calculate NO _x , CO, PM-10, VOC, and SO ₂ emissions	12	Changed to calculate NO _x and CO emissions only
31.4	Conduct NO _x emission source test of the replacement sources 1 and 2	None	Not carried, task completed 3/24/00
31.5	Conduct NO _x emission source tests on both Waukesha engines	None	Not carried, task completed 3/24/00
32.1	Report sulfur content of fuel	6.1d, 6.2c, 20	No change
32.2	Report 12-month rolling fuel usage and hours of operation	9.2, 11.2	Changed to report fuel use, hours of operation and 12-month rolling NO _x emissions for source 20, 21, 24, 25, 28, 33 and 34.
32.3	Report volume of gas flared	8.1	No change
32.4	Report monthly and 12-month rolling total NO _x , CO, PM-10, VOC, and SO ₂ emission rates	12.4	Changed to report 12 month rolling total NO _x and CO.
32.5	Submit a copy of gas analysis	12.5	No change
32.6	Submit a table of the daily oxides of nitrogen emissions from sources 1 and 2	None	Not required, source test limit not exceeded
33 & 34	NO_x BACT requirements for sources 3 and 4		

Permit No. 0123-AC011 condition	Description of Requirement	Permit No. 091TVP01 Rev. 1 condition	How condition was revised
33.1	Operate only in dry low NO _x mode	13	Changed to redefined dry low NO _x mode as the absence of a P1 mode pilot flame
33.2.1	Conduct NO _x source test on sources 3 and 4. Install, calibrate, certify, and maintain a CEMS for sources 3 and 4 if initial source test is greater than 24 ppmvd. If CEMS required monitor NO _x emissions. Monitor low NO _x emission mode. Monitor startup and shutdown of sources 3 and 4.	Not carried	Initial source performed. No CEMS required for sources 3 and 4.
33.2.2	Within 180 days after the conclusion of tests...install, install, calibrate, certify, operate, and maintain (CEMS) on the source exhaust stack if...test result is greater than 24 ppmvd etc	Not carried	Initial source performed. No CEMS required for sources 3 and 4.
33.2.3	If CEMS is required continuously monitor and record NO _x emissions...etc.	Not carried	Initial source performed. No CEMS required for sources 3 and 4.
33.2.4	Monitor low NO _x mode operations by the presence of a pilot flame...etc.	13.1	No change
33.2.5	Record the date, time, and duration for which either source 3 or 4 is in transient operations of start up and shut down mode.	13.2	No change
33.3	Submit NO _x CEMS reports. Report operation times and deviations from low NO _x mode.	13.3	Changed to report deviation from low NO _x mode for more than 6 minutes in any 3-hour period as excess emissions
34	For sources 3 and 4 monitor and report opacity readings greater than 10%.	4	The three-minute observation has been changed to add a six-minute average in accordance with new regulations adopted by ADEC.
35	Federal Regulation: 40 CFR 60 Subpart A applicable to sources 1-4	14-16, 39.1	Updated to Title V format

Permit No. 0123-AC011 condition	Description of Requirement	Permit No. 091TVP01 Rev. 1 condition	How condition was revised
36	Federal Regulation: 40 CFR 60 Subpart GG applicable to sources 1-4	17 and 18	Updated to Title V format
37	Comply with State opacity and particulate matter standards	4, 5, 24, 25	Changed opacity standards to add six minute average in accordance with new regulations adopted by ADEC
38	Comply with State sulfur dioxide standard. Use natural gas with hydrogen sulfide not to exceed 200 ppm and fuel oil with a sulfur content not to exceed 0.25% by weight.	19, 20, 26	No change
39	Upon request conduct opacity and/or particulate matter source test(s). Once each calendar year conduct a Reference Method 9 visible emission test on sources 1-4. Monitor fuel sulfur content.	4, 5, 20, 37	No change
40	Report source test results and fuel sulfur content.	6.1d, 6.2c, 20, 44, 53	No change
41	Comply with State air pollution prohibited regulations	34	No change

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

Conditions 1 - 3

Legal Basis: [18 AAC 50.350(c) & 18 AAC 50.400 – 420, 1/18/97]

The regulations require all permits to include due dates for the payment of fees and any method the permittee may use to re-compute assessable emissions.

Factual Basis: These conditions require the permittee to pay fees in accordance with the department's billing regulations. The department's billing regulations set the due dates for payment of fees based on the billing date.

The conditions also set forth how the permittee may recompute assessable emissions. If the permittee does not choose to annually calculate assessable emissions, emissions fees may be paid based on “potential to emit.”

The potential to emit for sulfur dioxide is based upon a 0.25% diesel fuel sulfur limit and a hydrogen sulfide content not to exceed 200 ppm in the natural gas as allowed in the permit.

Condition 4

Legal Basis: [18 AAC 50.055(a)(1), 1/18/97]
[18 AAC 50.350(d), 6/21/98]
[18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.055(a)(1), 5/3/02]
[18 AAC 50.346(c), 5/3/02]
[Construction Permit No. 091CP04 Preliminary 11/04/02]

Applicability: This regulation applies to operation of all fuel-burning equipment in Alaska.

Factual basis: Condition 4 requires the permittee to comply with the federal and the state visible emission standards applicable to fuel-burning equipment and incinerators. The permittee shall not cause or allow the equipment to violate these standards.

This condition has recently been adopted into regulation as a standard condition.

Gas Fired:

Monitoring – The monitoring of gas fired sources for visible emissions is waived, i.e. no source testing will be required. The department has found that natural gas fired equipment inherently has negligible PM emissions. However, the department can request a source test for PM emissions from any smoking equipment.

Reporting – The permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Section 13. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

Recordkeeping - The permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard, 2) and deviations from permit conditions. The permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Insignificant Sources:

For Source IDs 13 – 15, 24, 25, 28, 33 and 34 no monitoring is required because these sources are insignificant sources based on actual emissions and have permit conditions (Nos. 9 and 10) that limit their fuel consumption and hours of operation. As long as these engines do not exceed the limits they are insignificant sources by emissions as specified in 18 AAC 50.335(r) and no monitoring is required in accordance with recently

issued Department Guidance AWQ 02-014. The permittee must annually certify compliance with the opacity standard.

Flares:

Monitoring for flares (Source ID(s) 37 through 39) requires Method-9 observations of scheduled flaring events lasting more than one hour. The permittee must report the results of these observations to the department.

Condition 5

Legal Basis: [18 AAC 50.055(b)(1), 1/18/97]
[18 AAC 50.350(d), 6/21/98]
[18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.346(c), 5/3/02]

Applicability: This regulation applies to operation of all fuel-burning equipment in the State of Alaska.

Factual basis: Condition 5 requires the permittee to comply with the state PM (also called grain loading) standard applicable to fuel-burning equipment. The permittee shall not cause or allow fuel-burning equipment to violate this standard.

This condition has recently been adopted into regulation as a standard condition.

Gas Fired:

Monitoring – The monitoring of gas fired sources for particulate matter is waived, i.e. no source testing will be required. The department has found that natural gas fired equipment inherently has negligible PM emissions. However, the department can request a source test for PM emissions from any smoking equipment.

Reporting – The permittee must annually certify that only gaseous fuels are used in the equipment.

Liquid Fired:

Monitoring – The permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The permittee is required to record the results of PM source tests.

Reporting - The permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Insignificant Sources:

For Source IDs 13 – 15, 24, 25 and 28, 33 and 34 no monitoring is required because these sources are insignificant sources based on actual emissions and have permit conditions (Nos. 9 and 10) that limit their fuel consumption and hours of operation. As long as these engines do not exceed the limits they are insignificant sources by emissions category as specified in 18 AAC 50.335(r) and no monitoring is required in accordance

with recently issued Department Guidance AWQ 02-014. The permittee must annually certify compliance with the opacity standard.

Flares:

Monitoring of gas fired flares for particulate matter is waived, i.e. no source testing will be required, because of the difficulty and questionable results these tests produce when applied to flares. The department has recognized this fact by incorporating the waiver in the State Implementation Plan adopted in November 1984 which has not been federally approved. No recordkeeping or reporting is required.

Condition 6

Legal Basis: [18 AAC 50.055(c), 1/18/97]
[18 AAC 50.350(d)(1)(C), 6/21/98]
[18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.410(c), 1/18/97]

This condition applies to operation of all fuel-burning equipment in the State of Alaska.

Factual basis: The condition reiterates a sulfur emission standard applicable to fuel-burning equipment. The permittee may not cause or allow their equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.5% sulfur by weight will always comply with the emission standard. For fuels with a sulfur content higher than 0.75%, the condition requires the permittee to use Section 15 to calculate the sulfur-dioxide concentration using the equations to show that the standard is not exceeded.

Fuel sulfur testing will verify compliance.

Conditions 7 - 8

Legal Basis: [Operating Permit No. 9623-AA007, 4/14/97]
[18 AAC 50.350(d)(1)(D), 1/18/97]

Factual Basis: These conditions were contained in the last operating permit issued to the facility and have been carried forward into the Title V operating permit. They are intended to minimize the emissions from the Waukesha engines and the gas flares.

Conditions 9 - 13

Legal Basis: [Construction Permit No. 091CP04 Preliminary 11/04/02]
[18 AAC 50.335(g), 1/18/97]
[18 AAC 50.350(d)(1)(D), 1/18/97]

Factual Basis: Conditions 9 and 11 are owner requested limits incorporated in the Construction Permit No. 091CP04 that is issued concurrently with Revision 1 to this

operating permit in order to avoid pre construction review for sources except 3 and 4. Construction Permit No. 0023-AC007 was issued authorizing installation of Source ID(s) 3 and 4 and establishing the platform as a PSD major facility. Construction Permit No. 0123-AC011 was issued which contained minor revisions of the owner requested limits. Conditions 9 & 11 contain equipment fuel consumption limits to limit NO_x emissions to less than PSD thresholds.

Condition 10 is required to limit the hours of operation of the replaced firewater pump engines, sources 33 and 34 to qualify as insignificant sources and avoid periodic monitoring for visible emissions and particulate matter.

Condition 12 requires calculation of emission levels for all fuel burning equipment except Sources 3 & 4 on the Tyonek platform. The condition requires calculation for NO_x and CO. This condition is carried forward from the construction permit 9923-AC011 and was needed to verify that the facility truly is not a PSD Major facility. This condition is revised in Rev. 1 to this operating permit to require calculation for NO_x and CO only, as there is no underlying basis to calculate SO₂, PM₁₀ and VOCs.

In condition 13 the department finds that an emission rate achievable with Dry Low NO_x combustors, redefined in footnote 4 in Revision 1 of this operating permit, to be BACT on turbine sources 3 & 4. NO_x emissions of 25 ppmvd @ 15% O₂ and 6.2 lb per hour per unit is representative of the 82.6% NO_x reduction expected with this BACT option. The applicant is permitted to operate out of dry low NO_x mode for no more than 6 minutes in any 3-hour period while in compliance with the BACT limit as set out in Condition 13.3.

Conditions 14 - 16

Legal Basis: [18 AAC 50.040(a)(1), 1/18/97]

[Federal Citation 40 C.F.R. 60.11(d), 7/1/99]

Factual Basis: Conditions 14 - 16 require the maintenance of records of malfunctions of NSPS sources or pollution control or monitoring equipment. These conditions require that sources be operated in accordance with good air pollution control practices to minimize emissions. The conditions restate the prohibition against the use of gaseous diluents to achieve compliance with the opacity standard. All of these requirements are from 40 C.F.R. 60 Subpart A.

Condition 17

Legal Basis: [18 AAC 50.040(a)(2)(V), 1/18/97 and 18 AAC 350(g) – (i), 1/18/97]

[Federal Regulation: 40 CFR 60.332, 7/1/99]

Factual Basis: Turbines are affected facilities as classified in Federal Regulation: 40 CFR 60.330, Subpart GG, Standards of Performance for Stationary Gas Turbines, if constructed, modified, or reconstructed after October 3, 1977 and have heat input ratings greater than 10.7 gigajoules heat input per hour based on lower heating value of the fuel. NSPS standards impose additional emission limits on the affected facility's SO₂ and NO_x emissions. Condition 17 of the permit incorporate relevant portions of Subpart GG.

Standards for Nitrogen Oxides:

The turbines are subject to Federal Regulation: 40 CFR 60.332(a)(2) because they are classified under Federal Regulation: 40 CFR 60.330(b) as affected facilities with heat input loads greater than 10 MMBtu/hr (10.7 gigajoules/hr) and less than 100 MMBtu/hr (107.2 gigajoules/hr), and commenced construction after October 3, 1982.

The NSPS NO_x standard under Federal Regulation: 40 CFR 60.332(a)(2) states that no owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.015 * \frac{14.4}{Y} + F$$

Where: STD = allowable NO_x emissions, percent by volume at 15% O₂ and on a dry basis

Y = manufacturer's rated heat rate at manufacturer's rated peak load, kilojoules per watt hour, or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen, percent by volume, assumed to be zero for Alaskan fuels.

The limit for turbines 1 & 2 is 165 ppmvd at 15% O₂. This value was determined using manufacturer's heat rate of 13.05 kJ/W hr. The limit for turbines 3 & 4 is 181 ppmvd at 15% O₂ based on manufacturer's heat rate of 11.94 kJ/W hr (8439 Btu/hp-hr, from Solar Turbines data, Appendix B, NCUI 2001 Project permit application). Sources 1&2 and 3&4 were source tested in March 2000 and May 2001, respectively. The source test results for the units however, did not include all the information necessary to calculate unit specific heat rates. As a result, the allowable NO_x emission rate in the Operating Permit 091TVP01 Revision 1 are based on manufacturer heat rate, and remain 165 ppmvd for sources 1 & 2 and 181 ppmvd for sources 3 & 4.

Condition 18

Legal Basis: [18 AAC 50.040(a)(2)(V), 1/18/97]
[Federal Regulation: 40 CFR 60.333, 7/1/99]
[Federal Regulation: 40 CFR 60.8, 7/1/97]

Factual Basis: Affected turbines are subject to the SO₂ standards as stated in Federal Regulation: 40 CFR 60.333. The owner or operator shall not discharge gases into the atmosphere from a stationary gas turbine with SO₂ in excess of 0.015% by volume (150 ppmvd) at 15% O₂ and on a dry basis, or no owner or operator shall burn fuel with greater than 0.8% sulfur by weight.

Permit Condition 18.2 sets the frequency of fuel sulfur and nitrogen determinations. Condition 18.2 incorporates the applicant's fuel sulfur limit with NSPS monitoring, reporting, and testing requirements.

The permittee shall maintain records of all sulfur monitoring data for five years as set out in 18 AAC 50.350(h)(5). The applicant shall maintain records documenting the fuel supplier or source.

The permittee shall determine compliance with the sulfur dioxide standard per EPA approved alternative methods - ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association (GPA) method 2377-86. The applicant may use fuel analysis performed by owner/operator, service contractor, fuel vendor, or other qualified agency pursuant to 60.335(f).

The Conditions incorporate Federal test methods by reference.

Conditions 19 - 20

Legal Basis: [Construction Permit No. 0123-AC011, 7/18/01]
[18 AAC 50.335(g), 1/18/97]
[18 AAC 50.350(d)(1)(D), 1/18/97]

Factual Basis: Condition 19 requires the permittee to use diesel fuel with a sulfur content not to exceed 0.25% by weight. Condition 20 requires the permittee to use natural gas fuel with a hydrogen sulfide content not to exceed 200 ppm and testing of the fuel for sulfur content. The owner requested these conditions.

Conditions 21 - 22

Legal Basis: [Construction Permit No. 0123-AC011, 7/18/01]
[18 AAC 50.350(d)(1)(D), 1/18/97]

Factual Basis: These conditions require the permittee to notify the department if non-road (drilling rig) engines are to be placed on the platform and if requested by the department conduct an ambient impact assessment at that time.

Condition 23

Legal Basis: [18 AAC 50.346(b)(1), 5/3/02]
[18 AAC 50.350(m)(3), 9/4/98]

Factual basis: The regulations require the permittee to certify that their insignificant sources comply with applicable requirements. The condition restates the regulatory requirement.

Conditions 24 - 26

Legal Basis: [18 AAC 50.050(a)(2), 1/18/97]
[18 AAC 50.055(a)(1), 1/18/97]
[18 AAC 50.055(b)(1), 1/18/97]
[18 AAC 50.055(c), 1/18/97]

Factual basis: These are general emission standards which apply to all industrial processes fuel-burning equipment, and incinerators regardless of size. The conditions re-

iterate the general standards and require compliance for insignificant sources. The permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The department finds that the insignificant sources at this facility do not need specific monitoring, recordkeeping and reporting to ensure compliance.

Condition 27

Legal Basis: [18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97]

[Federal Citation: 40 C.F.R. 61, Subpart M, 12/19/96]

If the permittee engages in asbestos demolition and renovation, then these requirements may apply.

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the permittee engages in asbestos demolition or renovation. Because these regulation include adequate monitoring and reporting requirements and because the permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient.

Condition 28

Legal Basis: [18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97]

[Federal Citation: 40 C.F.R. 82, Subpart F, 7/1/97]

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the permittee uses certain refrigerants. Because these regulation include adequate monitoring and reporting requirements and because the permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient

Condition 29

Legal Basis: [18 AAC 50.346(b)(2), 5/3/02]

Factual basis: The condition requires the permittee to comply with good air pollution control practices for all sources.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the department. The

department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 30

Legal Basis: [18 AAC 50.045(a), 1/18/97]
[18 AAC 50.350(f)(3), 1/18/97]
[18 AAC 350(g) – (i), 1/18/97]

Applies to the permittee because the permittee must comply with emission standards in 18 AAC 50.

Factual Basis: The requirement prohibits diluting emissions as a means of compliance. The permittee has notified the department by correspondence dated December 27, 2000 that the equipment exhaust stacks operate under positive pressure and therefore dilution with ambient air is unlikely. The department can verify exhaust stack conditions during inspections.

Condition 31

Legal Basis: [18 AAC 50.335(g), 1/18/97]

The operator requested this condition.

Factual Basis: Extensive monitoring and recordkeeping is not warranted because the permittee has requested a prohibition to exclude open burning at the facility.

Condition 32

Legal Basis: [18 AAC 50.040(e), 7/2/00]
[18 AAC 50.045(d), 1/18/97]
[18 AAC 50.350(d)(1), 1/18/97]
[18 AAC 50.350(g) – (i), 1/18/97]

Applies to the permittee because the permittee will engage in industrial activity at the facility.

Factual Basis: The condition restates the regulatory prohibition on fugitive dust. This prohibition calls for reasonable precautions to be taken to prevent particulate matter from being emitted into the ambient air while engaged in industrial activities. The permittee has notified the department by correspondence dated December 27, 2000 that the facility does not conduct bulk materials handling, construction, or industrial activities at the platform. The department can verify these statements during inspections.

Condition 33

Legal Basis: [18 AAC 50.055(g) & 18 AAC 50.310(m), 1/18/97]

Applies to the facility because the facility contains a stack or source modified after November 1, 1982.

Factual Basis: The condition restates the prohibition on stack injection (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

Condition 34

Legal Basis: [18 AAC 50.346(a)(2), 5/3/02]
[18 AAC 50.040(e), 7/2/00]
[18 AAC 50.110, 5/26/72]
[18 AAC 50.350(g) – (i), 1/18/97]

Applies to the facility because the facility will have emissions.

Factual Basis: The condition restates the general prohibition on injurious air emissions, which applies to any emissions from the facility. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can violate this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the permittee must monitor and respond to complaints.

The permittee is to report any complaints and injurious emissions. The plant does not handle any large quantities of hazardous air pollutants. The permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the department.

Condition 35

Legal Basis: [18 AAC 50.235(a) & 18 AAC 50.350(f), 1/18/97]

Applies to the facility because the facility contains equipment subject to a technology-based emission standard.

Factual Basis: This condition restates a regulation that requires the permittee to take reasonable steps to minimize emissions if certain activity causes exceedance of a technology-based emission standard. Because the technology-based emission standard itself is a condition of the permit, the permittee will report the excess emissions under conditions 4, 13, 17, and 28. Because the excess emission report requires information on the steps taken to minimize emissions, this report is adequate monitoring for compliance with this condition.

Condition 36

Legal Basis: [18 AAC 50.335(a), 1/18/97]

Applies if the permittee intends to renew the permit.

Factual Basis: The condition restates the regulatory deadlines, citing the specific dates applicable to the facility. Submittal of the renewal application is sufficient monitoring, recordkeeping and reporting.

Condition 37

Legal Basis: [18 AAC 50.220(a) & 18 AAC 50.345(a)(10), 1/18/97]
Standard condition to be included in all permits.

Factual Basis: Condition requires the permittee to conduct source tests as requested by the department, therefore no monitoring is needed. Conducting the requested source test is its own monitoring.

Conditions 38 - 40

Legal Basis: [18 AAC 50.030, 12/30/00]
[18 AAC 50.035, 7/2/00]
[18 AAC 50.040(a)-(e), 1/18/97 & 7/2/00]
[18 AAC 50.220(b) – (c), 1/18/97]
[18 AAC 50.350(g), 1/18/97]
[18 AAC 50.990(88), 1/18/97]
[Federal Citation: 40 C.F.R. 51, Appendix M, 7/1/99]
[Federal Citation: 40 C.F.R. 60, 7/1/99]
[Federal Citation: 40 C.F.R. 61, 12/19/96]
[Federal Citation: 40 C.F.R. 63, 7/1/99]
Applies when the permittee is required to conduct a source test.

Factual Basis: These conditions restate regulatory requirements for source testing. As such, they supplement the specific monitoring requirements stated elsewhere in this permit. The tests reports required by later conditions adequately monitor compliance with these conditions, therefore no specific monitoring, reporting, or recordkeeping is needed.

Conditions 41 - 45

Legal Basis: [18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.345(a) & (l) – (o), 5/3/02]
Apply when the permittee is required to conduct a source test.

Factual Basis: The underlying regulations are 18 AAC 50.220 and 50.346. These regulations are incorporated through these conditions. Because these standard conditions supplement specific monitoring requirements stated elsewhere in this permit, no MR&R is required. The source test itself is adequate to monitor compliance with this condition.

Condition 46

Legal Basis: [18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Applies when the permittee tests for compliance with the particulate matter standard.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. The permittee must use a certain equation to calculate the particulate-matter emission concentration from the source test results. Because this condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or recordkeeping is required.

Condition 47

Legal Basis: [18 AAC 50.205, 1/18/97]
[18 AAC 50.345(j), 5/3/02]
[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.350(i), 1/18/97]

Applies because the permit requires the permittee to submit reports, and because the condition is a standard condition.

Factual Basis: This condition restates the regulatory requirement that all reports must be certified. To ease the certification burden, the condition allows the excess emission reports to be certified with the semi-annual operating report, although the excess emission reports must be submitted more frequently. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 48

Legal Basis: [18 AAC 50.350(i), 1/18/97]

Applies because the permittee is required to send reports to the department.

Factual Basis: This condition merely specifies where submittals to the department should be sent. Receipt of the submittal at the correct department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 49

Legal Basis: [18 AAC 50.200, 1/18/97]
[18 AAC 50.345(a)(8), 1/18/97]
[18 AAC 50.350(b)(3), 1/18/97]
[18 AAC 50.350(g) – (i), 1/18/97]
[18 AAC 50.345(i), 5/3/02]

Applies to all permittees, and incorporates a standard condition.

Factual Basis: Incorporates a standard condition in regulation, which tells the permittee to submit information requested by the department. Receipt of the requested information is adequate monitoring.

Condition 50

Legal Basis: [18 AAC 50.350(h), 1/18/97]

Applies to records required by a permit.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 51

Legal Basis: [18 AAC 50.235(a)(2), 18 AAC 50.240(c) & 18 AAC 50.350(i), 1/18/97, 18 AAC 50.346(a)(3), 5/3/02]

Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two regulatory requirements related to excess emissions—the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The condition does not mandate the use of the department's reporting form, but it does specify that the information listed on the form must be included in the report.

The reports themselves and the other monitoring records required under this permit provide an adequate monitoring of whether the permittee has complied with the condition. Therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 52

Legal Basis: [18 AAC 50.040, 7/2/00 & 18 AAC 50.350(i)(2), 1/18/97]

[Federal Citation: 40 C.F.R. 60 & 40 C.F.R. 61, 7/1/99]

Applies to facilities subject to NSPS and NESHAP federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60 and 40 C.F.R. 61. The permit does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 53

Legal Basis: [18 AAC 50.350(d)(4), 1/18/97]

[18 AAC 50.350(f)(3), 1/18/97]

[18 AAC 50.350(i), 1/18/97]

Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit and does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 54

Legal Basis: [18 AAC 50.350(j), 1/18/97]
[18 AAC 50.350(d)(4), 1/18/97]

Applies to all permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no monitoring, recordkeeping or reporting is needed.

Conditions 55 - 61

Legal Basis: [18 AAC 50.345(a)(1) – (7) & 18 AAC 50.350(b)(3), 1/18/97, 18 AAC 50.345(b) – (h), 5/3/02]

Applies to all operating permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 62

Legal Basis: [18 AAC 50.350(l), 1/18/97]

Applies because the permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: Table 2 details the state and federal requirements that are not applicable to the facility.

Conditions 63 – 65, (Section 13) Visible Emissions and PM Monitoring Plan

Applicability: Applies because these conditions detail the monitoring, recordkeeping, and reporting required in conditions 4 and 5.

Factual Basis: Each permit term and condition must include MR&R requirements showing verifiable compliance with each permit term and condition. The permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter. The correlation between particulate matter and visible emissions that is the basis for this monitoring procedure is discussed under conditions 4 and 5.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired sources. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Monitoring frequencies for hydrocarbon fuels, both liquid and gaseous, are detailed in these conditions. The monitoring intervals for gaseous fuels are less frequent than for liquid fuels in recognition of the reduced propensity of gaseous fuels to produce particulate matter as a result of combustion. This reduced level of monitoring for individual facilities in conjunction with the very large number of gas fired sources in Alaska should provide the department with sufficient data to evaluate the compliance history of these sources as a category.

Reasonable action thresholds are established in these conditions that require the permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Condition 67, (Section 13) Visible Emissions for Flares

Applicability: Applies because this condition details the monitoring, recordkeeping, and reporting required in condition 4.4 for gas-fired flares

Factual Basis: Condition 67 was developed to provide a standardized version of flare monitoring that is not dependant upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without emitting visible emissions, but actual field data demonstrating this assumption is not available. However, gas-fired flares have been shown to smoke when a control device, i.e. a knockout drum, flare scrubber, gas or steam assist, or vapor recovery system malfunctions. Thus, the condition sets out a protocol to collect actual field data to determine compliance with the 20% opacity standard for flares.

A recent department analysis of industry flaring operations indicates that 49% of the gas flared (by volume) is for pilot/purge, 25% is for flaring less than one hour, and 26% is for flaring that lasts more than one hour. Pilot/purge flaring constitutes half of all flaring by volume and is continuous in nature and can be observed at any time. This type of flaring has not caused violations of the opacity standard in the past and can be checked at any time by agency inspectors. The remaining half of the flaring volume is split evenly between less than and greater than one-hour duration. Therefore, the monitoring scheme in this condition addresses the half of the non-continuous flaring operations that are scheduled and for which a certified observer can reasonably be located onsite.

Since it is impractical to require facilities to have a certified Method-9 opacity reader on site for unpredictable emergency flaring, the monitoring protocol requires Method-9 readings only during scheduled flare events. Scheduled events such as those generated by maintenance activities and well testing of greater than one-hour in duration will be observed. These one-hour events are currently quantified and reported to the Alaska Oil and Gas Conservation Commission for other reasons and thus provides a confirming information record of the occurrence of these events. Only those events as defined in the condition need

to be monitored. If no events meeting this definition occur during the life of the permit then no monitoring is required.

Since only flaring that is scheduled and exceeds one hour is required to be observed operators will have time to provide certified Method-9 readers onsite. Most oil and gas production facilities in Alaska are located at remote sites so it is not reasonable to self-monitor all or even a large sample of the flaring that occurs. Data collected from planned events will help the department refine this monitoring scheme during future permit cycles. Process upsets and emergency events that may or may not exceed one hour occur randomly and do not lend themselves easily to periodic monitoring. At this time, the department will rely on facility excess emission reports, citizen complaints, and agency inspections for information concerning these short term and emergency events.

APPENDIX 1

Existing Permit Term Revocation Request – Facility Wide for Tyonek Platform

Operating Permit No. 9623-AA007

Existing Permit Term or Condition		Basis for Revocation Request	Effect(s) of Revocation Request	ADEC Decision	Reason
Description	Cond #				
Permittee shall comply with the State Ambient Air Quality Standards and Increments in 18 AAC 50.020	1	No regulatory authority found, except 50.350 (d)(1)(D). NAAQS and PSD increments are not title V applicable requirements	No effect	Agree	General statement, not necessary in permit because already present in regulation.
Permittee shall comply with the most stringent of applicable ambient and emission standards, limits, and specifications set out in 50.050(a)(1), (b)(1) and (c) and exhibit B of this permit	2	Superseded. All applicable emission standards or limits contained in 50.050 or Exhibit B are identified in Table 4-2. All other standards or limits are not applicable	No effect	Agree	The Title V permit contains all applicable emission limits
Permittee shall install, maintain and operate, in accordance with manufacturer's parameters, fuel burning equipment, process equipment, emission control systems, and monitoring	3	No underlying requirement. AS 46.14.110(e), requiring maintaining equipment in "good working order" was rescinded on December 6, 1996	No effect. Permit term is not required to ensure compliance with any applicable requirement or proposed term or condition	Agree	No authority
Permittee shall burn only formation gas or natural gas as fuel in Sources 1-19 and 37-40	4	Superseded. Fuel changes that increase emissions would be considered a modification, subjecting the facility to construction permitting requirements	No effect. Phillips has facility wide NO _x , CO, PM-10, VOC, and SO ₂ emission limits	Agree	No authority. Facility <u>does not</u> have specific contaminant emission limits.
Permittee shall neither modify nor replace any fuel burning equipment, which might result in increased potential air contaminant emissions or constitutes a modification as described by 18 AAC 50.990(56), without first notifying ADEC 30 days in advance	8	Superseded by new requirements in AS 46.14.120 and 18 AAC 50. Permittee cannot modify or replace equipment without proper authorization from the ADEC	No effect	Agree	Not needed. Modifications are covered by regulation 18 AAC 50.300 which require a construction permit for modifications that increase emissions.
Source testing requirements	10-15	Superseded by 18 AAC 50.345(a)(10) in each operating permit issued by the ADEC	No effect. Source test provisions of standard operating permit term 18 AAC 50.345(a)(10) supersede these conditions	Agree	Not needed. Source testing covered by Section 9 of the Title V permit.
Process monitors as described by Exhibit C, shall be installed, operated and maintained in accordance with 18 AAC 50.020	16	Superseded by monitoring, recordkeeping, and reporting proposed herein	No effect	Agree	Not needed. Monitoring, recordkeeping, and reporting are covered by source specific conditions in the Title V permit.
Permittee shall sample or provide a copy of a sample analysis conducted by the fuel supplier for the distillate	17	Superseded by proposed permit term/condition #11	No effect. Fuel sulfur monitoring requirements have been proposed	Agree	Not needed. Fuel sulfur monitoring, recordkeeping, and reporting are covered by conditions 6 and 19 of the Title

Existing Permit Term or Condition		Basis for Revocation Request	Effect(s) of Revocation Request	ADEC Decision	Reason
Description	Cond #				
oil used as a fuel supply for each delivery in accordance with the methods contained in Exhibit C			which ensure compliance with each applicable SO ₂ emission standard		V permit.
Permittee shall analyze for the H ₂ S in the fuel gas burned on the platform on a quarterly basis, in accordance with the methods contained in Exhibit C	18	Superseded by proposed permit term/condition #11	No effect. H ₂ S monitoring requirements have been proposed which ensure compliance with each applicable SO ₂ emission standard	Agree	Not needed. Fuel sulfur monitoring, recordkeeping, and reporting are covered by conditions 6 and 20 of the Title V permit.
Permittee shall notify the ADEC's Juneau office by telephone or facsimile promptly, but no later than 24 hours, of any equipment or process failures, which increase air contaminant emissions beyond permitted levels.....	21	Superseded. Phillips has proposed terms and conditions to ensure compliance with the unavoidable emergencies and malfunctions, and excess emissions reporting requirements under 18 AAC 50.235 and 50.240	No effect. Proposed terms and conditions for excess emissions supersede this condition	Agree	Not needed. Excess emission reporting is covered by condition 51 of the Title V permit.
Permittee shall submit a written report to the ADEC within five working days of the incident if a facsimile was not sent under the condition above	22	Superseded. Phillips has proposed terms and conditions to ensure compliance with the unavoidable emergencies and malfunctions, and excess emissions reporting requirements under 18 AAC 50.235 and 50.240	No effect. Proposed terms and conditions for excess emissions supersede this condition	Agree	Not needed. Excess emission reporting is covered by condition 51 of the Title V permit.
Permittee shall notify ADEC should the average H ₂ S content exceed 250 ppm in the fuel gas. If the H ₂ S exceeds 250 ppm, permittee shall conduct an ambient modeling impact analysis. BACT is required if modeling shows >70% increment consumption	23	No regulatory authority found. Superseded by proposed term #23 (construction permitting requirement). BACT is not applicable if fuel gas H ₂ S increases, because "drift" from reservoir souring does not constitute a PSD modification	No effect. Phillips will conduct a comprehensive review of applicable air permit issues in response to term #23	Agree	The permit has a facility wide limit of limit of 200 ppm for H ₂ S content of fuel gas. If this limit is violated in the future the ADEC may invoke 18 AAC 50.201 as part of a compliance action.
Permittee shall allow access to the facility promptly, at any reasonable time, to the department's representatives, in order to conduct inspections or tests or to determine compliance with this permit and State regulations	24	Superseded. Permit term is not required because language regarding access to the facility to the facility under 18 AAC 50.350(b)(3), Standard requirements, is included in each operating permit issued by ADEC	No effect. Standard requirements supersede this condition	Agree	Not needed. Facility access for inspections is covered by condition 61 in the Title V permit
Permittee shall submit two copies of a Facility Operating Report, by the 30 th of January, April, July, October as described in Exhibit D, to the department	25	Not Required. Superseded by monitoring, recordkeeping, and reporting proposed herein	No effect. Standard requirements supersede this condition	Agree	Not needed. Facility operating reports are covered by condition 53 of the Title V permit.
Permittee shall maintain test results... in active files for no less than one year, and available on request for not less than 3 years	26	Superseded. For each applicable requirement, the permittee has proposed maintaining any required records for 5 years consistent with 18	No effect. Reporting requirements of 18 AAC 50.350(I) supersede this condition	Agree	Not needed. Records retention is covered by condition 50 of the Title V permit.

Existing Permit Term or Condition		Basis for Revocation Request	Effect(s) of Revocation Request	ADEC Decision	Reason
Description	Cond #				
		AAC 50.350(h)			
Exhibits A, B, C, D, E	Appendix	Superseded by source inventories; terms and conditions, monitoring, recordkeeping and reporting, and documentation provided and proposed herein	No effect. Phillips has proposed terms and conditions ensuring compliance with all applicable requirements	Agree	Not needed. The material covered in these appendices are covered by numerous conditions within the Title V permit.